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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,054	02/07/2002	Vittoriano DiLuzio	VIFAN.UTL	3391

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HINKLE & O'BRADOVICH, LLC
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EXAMINER

JACKSON, MONIQUE R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,054

Applicant(s)

DILUZIO ET AL.

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The amendment filed 8/22/03 has been entered. New claims 12-14 have been added.

Claims 1-14 are pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. The amendment filed 8/22/03 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "the metal layer is about 100-400 angstroms".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

4. Claims 12 and 13 are objected to because of the following informalities: the terms "hexane" and "octane" in Claims 12 and 13, respectively, should really be "hexene" and "octene" given that the polyethylene would be formed from ethylene and hexene or octene and not the related hexane or octane compound. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 has been narrowed to recite a density of about 0.92 –0.94 g/cc however it is noted that the original disclosure recited a density of 0.92-0.956 and provided no teaching or guidance to one having ordinary skill in the art to specifically select the newly claimed endpoint 0.94. Hence, the claim limitation limiting the invention to the newly claimed endpoint of 0.94 is considered new matter. It is also noted that the recitation in Claim 14, “the metal layer is about 100-400 angstroms” is not supported by the original disclosure given that the original disclosure at the time of filing provided no teaching or guidance with respect to the specific angstrom thickness range of the metal layer wherein the Examiner notes that though the original disclosure provided an optical density range which directly corresponds to metal layer thickness, the original disclosure does not provide any limitation or guidance with regards to the type of metal utilized in relation to the recited optical density range.

Claim Rejections - 35 USC § 112

7. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As recited in the prior office action, the term "thin metal layer" is a relative term which renders the claim indefinite. The term "thin" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

8. Claims 1-2, 7-11, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bader et al (USPN 5,972,496.) Bader et al teach a film structure comprising a polypropylene

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core layer (b), such as propylene homopolymer, that comprises about 70 to about 95% of the film thickness, and a skin layer (c) comprising an ethylene polymer that is metallized by application of a thin metal layer, particularly aluminum, to an optical density of about 1.5 to about 4.0, which inherently corresponds to a metal layer thickness within the instantly claimed range, and specifically about 1.8 to about 2.6, wherein the polyethylene of the skin layer may be LDPE, LLDPE, MDPE, or HDPE, preferably having a density between about 0.94 and 0.96 g/cc, and wherein the skin layer (c) and the film have thickness within the instantly claimed ranges (Abstract; Col. 3, lines 6-34; Col. 4, line 61-Col. 5, line 59; Col. 6, lines 8-13; Examples.)

Hence, Bader et al anticipate the instantly claimed invention, particularly given that it recites the end point 0.94 g/cc, and further given that LDPE, LLDPE, and MDPE inherently encompass the instantly claimed density ranges.

Claim Rejections - 35 USC § 103

9. Claims 3-4 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bader et al in view of Migliorini et al. The teachings of Bader et al are discussed above. Bader et al teach that the core is preferably polypropylene, particularly highly isotactic polypropylene, exemplifying polypropylene homopolymer, and that preferred polypropylenes are well known in the art but do not specifically teach that the polypropylene of the core layer is a copolymer or a terpolymer. However, propylene copolymers and terpolymers are obvious species of polypropylene utilized as a core layer in a metallized multilayer substrate as taught by Migliorini et al (Col. 1, lines 54-64) and hence would have been obvious to one having ordinary skill in the art at the time of the invention. Further, it is well-established in the art that LLDPE, LDPE, MDPE and HDPE are produced from ethylene optimally polymerized with hexene or octene to

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modify the properties of the polyethylene based on the desired end use and hence would have been obvious to one having ordinary skill in the art at the time of the invention.

Response to Arguments

10. Applicant's arguments filed 8/22/03 have been fully considered but they are not persuasive and/or moot. The Applicant argues that the instant claims now limit the invention to 0.92-0.94 g/cc and that the Applicant has attained a larger density range in which metallization is possible, 0.92-0.956. The Applicant states that the claims have been amended to include not only medium density polyethylene but also 0.92-0.94 which allegedly is not taught by either of the references. However, as stated above, the Examiner takes the position that the terms LLDPE, LDPE, and MDPE would inherently encompass the instantly claimed range and hence anticipates the invention.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428.

The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Monique R. Jackson
Patent Examiner
Technology Center 1700
November 17, 2003